Under Secretary of Defense Aldridge Media Roundtable

Hot Topics for May 2 Roundtable—Nunn-McCurdy, V-22 Osprey, Crusader

Nunn-McCurdy explanation and certification documents are available at **http://www.defenselink.mil/news/May2002/d20020502nmc.pdf**.

Crusader
Image courtesy United Defense

LPD-17, USS San Antonio
DoD Image

The first thing I'd like to go over is the Nunn-McCurdy certification. As you know, we have six programs that we have to take a look at. And the certification process has to occur by tomorrow. And I'll talk a little bit about that, because I've already made the decisions. The other is the V-22 return to flight, which we've had a meeting on recently. I'd like to talk about the missile defense program, and then the Navy DD(X). And then I'm sure you'll have some questions on Crusader.

Nunn-McCurdy Certification of Six Programs

As you know, when we have a Nunn-McCurdy breach of 15 percent, we have to notify Congress. When we have a Nunn-McCurdy breach of 25 percent, we have to notify Congress, and then the Secretary of Defense has to certify to four criteria for the program to continue. The Secretary has delegated that certification process to me—as the Under Secretary for Acquisition, Technology and Logistics.

The four criteria we have to certify are:

- One: *Is the program essential for national security?*
- The second criteria: *Is there an equally capable alternative of lesser cost available?*
- The third criteria: *Is cost under control?*
- And the fourth criteria: *Is there management in place to keep the costs under control?*

If you cannot certify to those four criteria on a specific date, then the fund obligation stops, which is what happened on Navy Area [sea-based missile system].

In accordance with this law, and based upon the schedule that's been given for these six programs, I must sign that certification letter to Congress by May 3rd. There's been a huge amount of work done by the program offices, by the military departments, and the OSD staff since the congressional notification occurred. And because of all this work of getting the programs back on track, I

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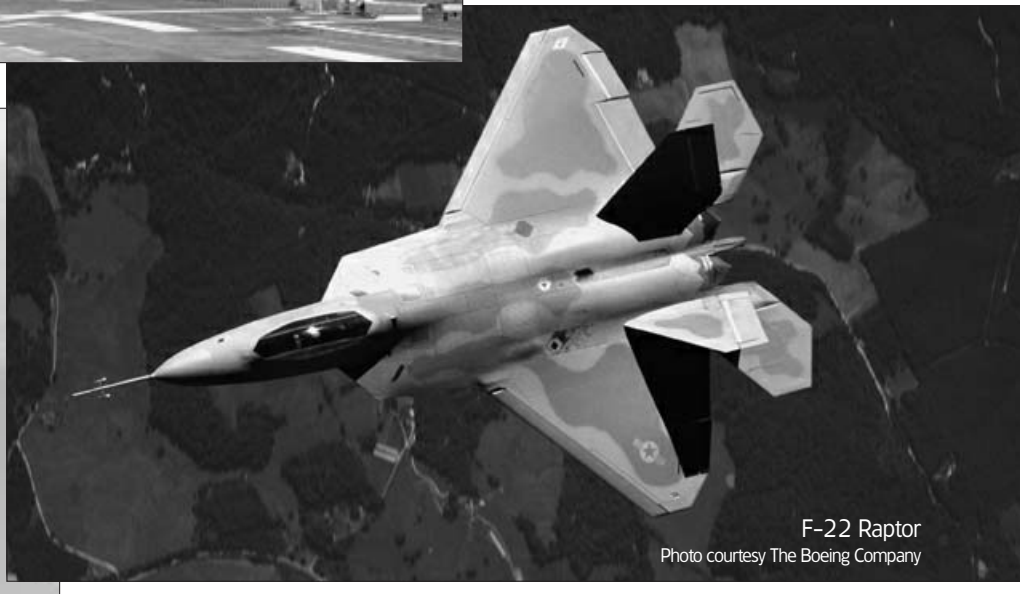
Petty Officer 3rd Class Jerry Lowe, a Navy aviation boatswain's mate, directs an MV-22 Osprey landing on the flight deck of the *USS Essex* (LHD 2). The Osprey, with its unique tilt rotor design, is again undergoing operational testing designed to evaluate the operational effectiveness and stability of the Osprey for service with the Marine Corps and Air Force.
DoD photo by Navy Petty Officer 3rd Class Jason A. Pylarinos



F-22 Raptor
Photo courtesy The Boeing Company

An ATACMS missile is fired from the Multiple Launch Rocket System (MLRS) M270 weapons platform.
Photo courtesy Lockheed Martin Missiles and Fire Control—Dallas

am able to certify that each of the six programs now *do* satisfy the four criteria for continuation. And I signed the certification letter to this effect to Congress today.

Let me just go through, very briefly, some of the programs and the reasons that I felt confident about certification.

H-1 Helicopter

One was the H-1 helicopter. We're re-manufacturing 280 H-1s for the AH-1 Cobra and for the UH-1 Huey, replacements. Based upon my review of the management team, we're now using the OSD [Office of the Secretary of Defense] cost estimates. In fact, the Navy and OSD cost estimates were consistent with each other. And if you look at the alternatives, the alternatives are much more expensive than continuing with the current re-manufacturing effort.

CH-47 Helicopter

The CH-47 helicopter. We're going to re-manufacture 317 CH-47s for the heavy lift helicopter replacement. Every alternative was two to three times more expensive. The CAIG [Cost Analysis Improvement Group] estimates are now being used. And looking at the management team we have in place at Boeing, we have confidence that they could pull off the job.

LPD-17

The LPD-17 amphibious transport dock ship—there are four ships under contract leading to a 12-ship buy. Ninety-five percent of the design has been completed. Most of the problems are behind us. They are also using the CAIG cost

estimate. So it looks like we've got costs under control.

Chemical Demilitarization Program

The chemical demilitarization program—this is the destruction of chemical weapons per our treaty. There is really no alternative to this approach; [there are] various technologies on how to do that, which we are looking at. And even though the program is in place, we are looking at an alternative to accelerate the process, to see if we can get rid of some of the stuff quicker. We are using the CAIG estimates for cost and schedule.

MLRS Upgrades

The Multiple Launch Rocket System [MLRS] upgrades—this improves the launcher, develops a GPS [Global Positioning System]-guided Multiple Launch Rocket System, and extends the range. This is a joint program between Germany, Italy, France, and the UK. We have new cost estimates and a reasonable production profile, and the contractor is now achieving good cost performance.

SBIRS High

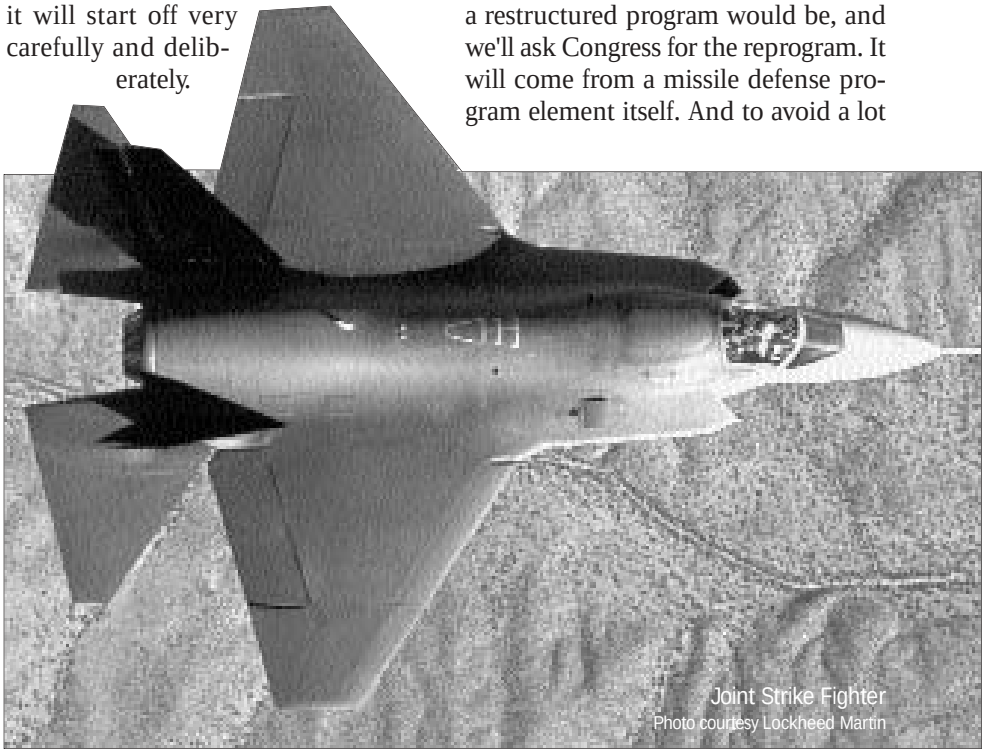
The last of the six is the Space-Based Infrared Radar System [SBIRS High]. This is the high version. This is the replacement for the current ballistic missile early-warning system, with the added requirements for technical intelligence and missile defense. This is essential for national security. The alternatives were much more expensive given the state of the current program. We are again using CAIG cost estimates, and there's a new management structure in Lockheed Martin and Northrop Grumman that gives me the confidence that we could pull this off.

So those are the six. They have been certified, and I think for good reason. Again, a lot of work went into making those happen.

V-22 Return to Flight Status

On April 25th, the Secretary of the Navy, the Commandant [of the Marine Corps] and I met to review the return to flight status for the V-22. The program manager, Dan Schultz, and his team, with a lot of additional help, have put together a comprehensive flight test program that will prove—or not—the reliability, safety, and operational suitability of the V-22. And I said before, this will be an event-driven test program, not a schedule-driven program. I concurred in the Navy's plan to reinstate the V-22 flight test program. And I think the first flight plan is for May 9th.

I looked thoroughly at this program. Some of the issues that I had with the hover and high rate of descent performance are going to be addressed within the first nine months of the flight test program, even though it will start off very carefully and deliberately.



Joint Strike Fighter
Photo courtesy Lockheed Martin

Missile Defense

As a result of many of the problems of SBIRS-Low last year, I asked the Missile Defense Agency to look into a restructured program. This has now been completed. And [Lt. Gen. Ronald T. Kadish, Director, Missile Defense Agency] has briefed a summary of the plan to the Hill several weeks ago.

Generally—and let me summarize it—we're going to form a joint contractor team of TRW and Spectrum Astro, the former competitors. TRW will act as the prime for the spacecraft design and development, and Spectrum Astro has agreed to this arrangement.

We'll compete the payload between Northrop Grumman and Raytheon. We're going to implement spiral development, evolving the spacecraft capability with time. And by doing this, starting off with a little slower pace, I believe we can plan for the first increment to be launched in the 2006 to 2007 timeframe. We will ask Congress, through reprogramming, for an additional $13.4 million in FY '02. As you recall, in the appropriations process there was $250 million left in the program. We're finding that's just a little bit short for what a restructured program would be, and we'll ask Congress for the reprogram. It will come from a missile defense program element itself. And to avoid a lot of confusion between SBIRS-Low and SBIRS-High, I'm going to ask General Kadish to give me another name for SBIRS-Low. That will probably save a lot of time and effort.

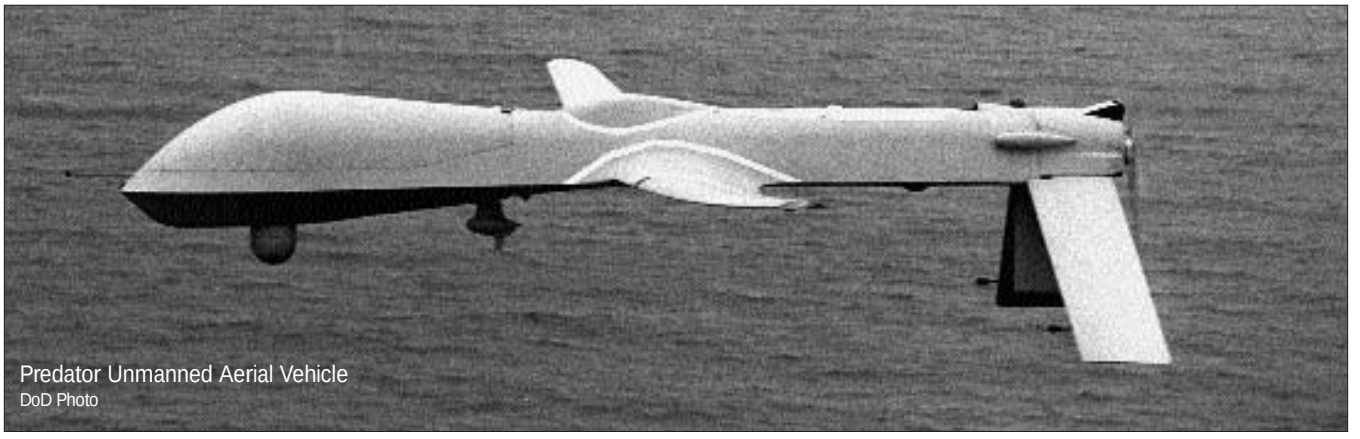
As you may recall also, we terminated the Navy Area Terminal Defense System last December. I asked the Missile Defense Agency to develop a replacement program to account for the new missile defense technologies. That work is also completed. I've been briefed on it. We have—based on the briefing and the information I got from General Kadish—decided not to start a new Navy Termi-

nal Defense System. We found that through improvements in the Navy Midcourse System—the so-called Upper Tier, which is performing quite well—and some improvements in the existing Block 4 Standard Missile, we can achieve much of the capabilities lost as a result of the removal of Navy Area. And certainly, we do not need any more pressure on our budget resulting from a new start. So we're not going to pursue that plan.

RAH-66 Comanche aircraft.
Photo courtesy The Boeing Company

On Monday, the Assistant Secretary of the Navy, John Young, announced the source selection for the Navy's new DD(X). I'd like to congratulate the Navy and the Gold Team of Northrop Grumman and Raytheon for an excellent design and a winning proposal. The award of the DD(X) design agent contract marks an excellent beginning for a new family of surface combatants for littoral operations, land attack, and air and missile defense capabilities. This program is evolutionary in its final development approach; [it] will be a model for Navy acquisition in the years to come. It will bring transformational capability to the fleet, as well as the acquisition process. This is a great new program for the Navy, and I wish them well.

Questions?



Predator Unmanned Aerial Vehicle
DoD Photo

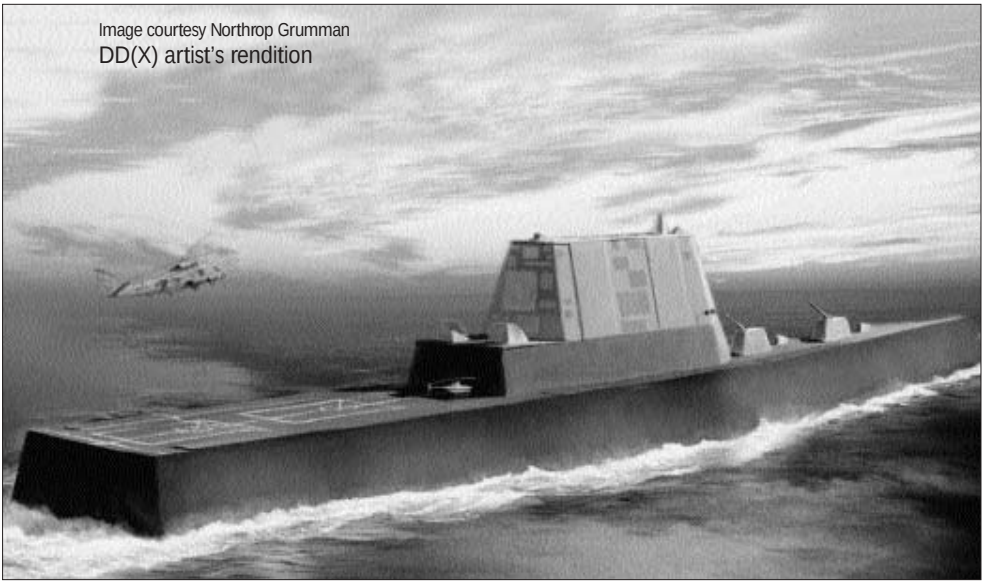


Image courtesy Northrop Grumman
DD(X) artist's rendition

Q

Mr. Secretary, as the V-22 starts flight testing again, what standard are you going to use for deciding if you should cancel the program? If there's a crash, is that program dead?

A

Not necessarily. It could be pilot error. We'd have to go into it and determine. As you know, there are really just three criteria that we're looking for [in] the V-22: reliability, safety, and operational suitability. Operational suitability, of course, is a wide range of things: Will it operate well off of the deck of a ship? Does it have any landing-zone consid-

erations, like dust and debris? Can it be dangerous to fly in that kind of environment? Is the performance what we expect it to be? As has been demonstrated, there are some problems in going through [these issues].

If you read the blue-ribbon report and the independent NASA [National Aeronautics and Space Administration] study, which I have [read] thoroughly, you'll find [there are] many recommendations in there to take a look at some things like, do you need more control authority? Some of the hover performance that was predicted, versus what was actually achieved, was different. I'd like to know why that occurred. Is something wrong with aerodynamics determination? The prop loading is very high on the V-22, which doesn't give it a lot of maneuverability margin. We need to check that out. We've all talked about the vortex-ring-state conditions that occur with these rotors, especially when they're out on 20-foot Moment Arms.

All those things are going to be checked very thoroughly. The flight-test plan looks very good to me. I was worried that they were going to put the hard stuff at the end. They're not. They're going to bring it up. It's going to be about nine months. They'll have some of the high-rate-of-descent activities, as well as some of the hover performance, which is that uncertainty that I mentioned. So I think the program is well laid out. Again, it's not schedule-driven; it's event-driven. And I think, based upon the comments of the program manager, [in whom] I have very high confidence—I think we're going to get a good program. It's going to prove itself one way or the other.

Q

But you remain skeptical about the aerodynamics of tilt-rotor technology, generally?

A

Yes. I think there's a lot of uncertainty we don't yet know about. Yes, and—but I'm a lone soul here—in some cases, the flight-test program is going to prove or disprove whether or not my concerns are valid. And the Commandant of the Marine Corps now concurs. He's going to watch that [Osprey testing]. And we're still looking at alternatives, just to make sure.

Q

Using as a baseline the transformation and the availability or lack of availability of dollars, [I have a] two-part question: One, has the Pentagon—yourself included—decided to cancel the Crusader program? We're not talking about friends on the Hill and what the Army may be doing, but has DoD made that decision?

And based not on the flight-testing of the V-22, but again, on transformation and costs and dollars available, what about the programs such as the V-22, the F-22, the Comanche, and the Joint Strike Fighter? Are they in doubt? Are they firm? How would you categorize [the situation]?

A

Let me stop [and] back up a little bit. All these things have come to the [forefront] because we're in the process of trying to publish a *Defense Planning Guidance*. We're trying to get it out this week. It probably won't make it this week. Maybe [we] can get it out on Monday, but when the Secretary goes through the planning guidance and [is] looking (we're preparing for the FY '04 through '09 budget), he's [typically] asked a lot of questions about things like this. I mean, when you look at the budget: Are all these things affordable? Are they the right priorities? We've listed a series of things we want to look at. And Comanche is one of them, and F-22 is one of them. And we make sure that we have an alternative available to the V-22. If we have a problem with V-22, we don't want to be sitting around for another two years figuring out what to do if the V-22 isn't [suitable], because the Marines need a modernized helicopter.

Q

Joint Strike Fighter?

A

Joint Strike Fighter is certainly one of those. You know, the Navy, Marine Corps have done a study. They've put that in. We've asked for some [and are] looking at alternatives, [as] to what is the right mix of those because we haven't made up our mind exactly. All these issues are now put on the table for study. And that's what we've done. We've asked the Army, we've asked the Air Force, we've asked the Navy to come in with studies at various dates, [for example], "Here are some alternatives—and we'd like for you to look at this alternative or that alternative." In some cases, we just say, "Give us a plan, we don't have an alternative."

Tankers. We need to replace tankers. The Air Force has been asked, "Give us a plan for how we're going to do tankers." These are the kinds of things that we're looking at, and they have been put on the table. And certainly we've asked the Army to look at an alternative; if you didn't have Crusader, what would you do, if that's the case? It's a plan. Give us a plan under these conditions.

No decision has been made because we haven't seen the results of the studies, and they have not been briefed for the Secretary [nor] the Deputy Secretary. And certainly they will go into the budget planning process when we see the studies relative to the other priorities. So, no, we haven't made any decisions.

Q

Just a follow-up. We have been led to believe, I assume perhaps incorrectly, that at least some of these programs were locked in concrete and were going forward, particularly the F-22 for the Air Force, which has stated that they [the Air Force] must have it. Of course, we know the Marines want the V-22; they desperately say they've got to have something to replace the aging C-46s and what have you. But now we see these programs are not locked in concrete—that there is a new view, perhaps. Has there been a substantive change in the way these things are being addressed?

A

Well, I don't think you could find any program locked in concrete. I would imagine you would go back and look at the CH-47 and the H-1 and LPD-17, and somebody would say those were locked

in concrete in the past. If it's not performing, it is certainly not locked in concrete, in my view. If we find that there are better ways to do something, I'm prepared to advise the Secretary of Defense that there are better ways to do things and different priorities. And I think we have to. I mean, we owe the American taxpayer this—to provide as much use for the taxpayers' dollars as we can get. And I don't think there is any program that should be considered locked in concrete, unless you want to consider the Pentagon. This is probably the only place that's BRAC [Base Realignment and Closure]-proof at this point.

Q
A last follow-up, if I may.

A
Yes.

Q
But the F-22—are you saying in so many words it's not performing up to your desirability or others'? That has been viewed, at least by the Air Force, as an absolute "must" to replace the F-15.

A
I think the Air Force view is exactly the view that they have had. The issue we have here is, are we buying the right number of aircraft? Given [the fact that] now the Joint Strike Fighter is underway, given the fact that we've got the F-18, [and given the fact that we've] been looking at the Navy's mix, to me everything is on the table to take a look at the balance—how many we're going to buy. Maybe we're not buying enough. In the study, we're looking at alternatives to include increases in the F-22 if that's the right [course of action].

Q
To make sure that I'm not shorthanding your views inaccurately, my reading of your previous remarks was that it [the Osprey] could be fundamentally and fatally flawed. That's one question.

The second, related question is, are you familiar with the IDA [Institute for Defense Analyses] report, and what did you think of it? It's out.

> The situation is that the world changes. Things happen, and we are taking a look at spending our taxpayer dollars in the right way.

A
I was briefed on the IDA report. Some of the concerns that they had are some of the ones I had. Some of the concerns that were in the blue ribbon panel report, I had. Some of the concerns that were in the independent report, I had. There are many recommendations from those studies to go out and look at other things. They highlighted this hover performance anomaly; what's the difference between predicted and achievable? We have not done a lot of the test of the V-22 in combat maneuvering—you know, close to the ground, you're in a dangerous area, and you've got to get out—we haven't done any of that. We haven't really done a lot of landing and testing in sand and snow and debris. We haven't flown the envelope of this aircraft to various points. We haven't determined where we get into this vortex ring state problem thoroughly. I could just go on. We haven't done a lot of testing on shipboard capability.

Q
What's the Aldridge opinion of the V-22 at this moment?

A
If it performs as predicted—reliably, safely, and operationally suitable, under all those conditions we've outlined—then it has a transformational capability for the Marine Corps.

Q
But didn't you have some doubts previously? It seemed to come through that way. Would "skeptic" be the right word?

A
Yes. I continue to be skeptical until they prove to me those three things.

Q
But you don't think it's fundamentally flawed?

A
I don't see it as fundamentally flawed at this point. I will keep an open mind because there are some things that it does in certain performance [areas] that tell me it's close to being marginal, and that is, for example, maneuverability at low speed. So I'm just going to look—I can't sit out here and make a judgment that I believe [the Osprey] is fundamentally flawed. I think there are some problems with the V-22, and the best way to find those out is to put it back in the flight test program and wring it out. If it's successful, I will give it full blessing; it will go because it does have good performance [and] if it does the things we want it to do.

Q
Those tests you mentioned—why weren't they done earlier?

A
I wasn't here at the time. I can't tell you. Although, as you know, there was a lot of concern about the hiding of some test results within the Marine Corps.

Q
Don't you think this is being pushed through too quickly without having the adequate tests?

A
It is likely, [there] had been a little more optimism about its performance.

Q
Mr. Secretary?

A
Yes, please.

Q
Back to the Crusader for a minute. Secretary Rumsfeld said today that it's his intention—and that's the word he used, intention—to cancel the program, although

a final decision hadn't been made. Now, in your view, is it appropriate for the Army to continue to solicit support for the program on the Hill, knowing that the Secretary intends to cancel it?

A

I did not hear the Secretary's press conference, so I don't know what he said there. So I'm assuming that you're right.

I think the Army should really be quite objective in this process, and we've asked the Army to come in with a plan that cancels the Crusader. We will see what it looks like, and let the Secretary make up his mind as to what are the priorities for this Department. And to be on the Hill lobbying for a different approach, I think, is probably not appropriate.

Q

A follow-up. Did you see the talking points they put out? The opening line said, "A cancellation would put soldiers at risk."

A

Let me just not comment on that, okay?

Q

Why?

A

Because I think it's something that the Army should comment on. I didn't write it, so let them comment.

Q

Going back to DPG [Defense Planning Guidance]. The DPG will have, when it's final, a notice to the Army to come back in 30 days with a program that cancels the Crusader and looks at alternate programs like the Excalibur. Is that accurate?

A

I don't like to comment about what's in classified documents. Let me just say it in a very general sense. The Army has been tasked to come in with a plan that would include the cancellation of Crusader within 30 days, with a description of what the concept would look like with a lot of different variables in it. They've been asked to do that; Secretary White's agreed to do that. We'll come back, we'll brief the Deputy Secretary in 30 days, and then we'll make a decision—is this the right plan, or it may not be the right plan. It may have some warts on it. It may not be right. It may be that it's the wrong way to go. We're allowing the Army to tell us if that is in fact the case, being as objective as possible, to include participation by my office and PA&E [Program Analysis & Evaluation] in this process, so we have a basis for an analytical judgment based upon rational and objective criteria.

Q

On SBIRS-High, can you give us some of the details about the changes made that have gotten it under control? Does any of it have to do with losing any capabilities?

A

No. As part of the criteria I had to look at alternatives to see if there were any cheaper, better alternatives. And we did so. We found that there were none. Given where we were in the SBIRS-High, there were none that would give me the confidence that I would pick the alternative, versus the plan that had been put into SBIRS-High.

What gave me the confidence was that I think the contractor realized that the performance and the management approach that he was taking for SBIRS-High needed some serious adjustment, and he took those measures to make that happen.

The other one is that we've looked at the cost estimates for the future; using our independent group, they came to a conclusion that the costs obviously were wrong that we were using. The Air Force agreed to use the independent cost in their future [estimates], so the issue of cost uncertainty went away to the best we can [tell]. Clearly, something could happen tomorrow afternoon and blow up the thing. But given our best estimates, the schedule and the cost estimates that were being used by the Air Force are what we think OSD and the independent group said [they were].

The Joint Chiefs of Staff— in fact, General Myers—came on very strongly that this was essential for national security to have this capability as defined by the baseline SBIRS-High. So we left that program, in terms of its requirements, alone. We redid the costs, redid the schedule. The new management scheme's in place, and I think the message to the prime contractors, which are Lockheed Martin and Northrop Grumman, is that they're in a spotlight. And if we find that six months from now the program is going south, I'll have no hesitation to pull the plug.

Q

Can you just give us generally some of the management differences now versus before?

A

Some of the cost earned-value management systems have been put in place. More senior leadership has been put in place at Sunnyvale and within Northrop Grumman. I think the management attention given to the program with Vance Coffman (Lockheed Martin) and Kent Kresa {Northrop Grumman) [is] basically [in the form of] signing up that they will support and defend this program and make it happen properly.

Q

You mentioned changing the name on SBIRS-Low. Is that a big deal? What kind of problems have you encountered?

A

[It's] probably just [a matter of] changing the stationery.

Q

Sir, could you tell us, in your own words, what the problems are that you all see with Crusader? And could you also go through the Nunn-McCurdy list and give us the new cost estimates, and if you have them, what the changes [are] from the old set?

A

They're in a letter that I sent to the Congress. I probably ought to pass it out. Yes, the unit costs increase. Yes, they're all spelled out in the letter to the Congress, to the various committees on the Hill. And what was the other question?

Q

Crusader—your concerns with Crusader.

A

Again, it's not a decision to kill the program at this point. It's going to be reviewed. The concern—let me just give you kind of a gross concern. The battlefield of the future is going to be represented by very precise target location, digital terrain mapping, and very precision weapons delivery. If you look at what is the best way in the future to achieve a capability for the Army that's in the [warfighter's] best interest, it is providing the Army with a quicker pace to achieve the technologies that are associated with this type of battlefield environment; get precision weapons to the Army faster; and get the Army moving toward more mobility, lethality, [and] deployability, which is what they're doing on the future combat systems.

If you then say to yourself, "What is the Army doing relative to moving toward that new battlefield?"—[in view of the fact that] there's a $9 billion bill to pay for Crusader. And if you think about it, you say, "Well, $9 billion is taking money away from things that could be used to get the Army toward more precision, more lethality, more mobility, more deployability."And so there's a question raised: What should be the priority? Should the priority [be] for Crusader to "go" [at a cost of $9 billion], or [should that] $9 billion [be used] to move the Army toward this new technology at a faster pace.

The Secretary of Defense has to balance those two questions. He's asked the Army to provide that balance for him. "Tell me what we can do." An example [would be], could we build the Excalibur—which is a long-range, high precision weapon—quicker by taking some of the Crusader money to do that? And the Secretary of Defense has a legitimate question. And what we have done is say, "This appears to be attractive. Let's go take a look at it … and come back and tell us what you think."

Q

Yes, I have a question about Navy Area. In a similar roundtable here a few months ago, after its cancellation, you said that you could certify that it was a valid requirement for national security, but the cost and management were more problematic. But now, with it not being revived—I mean, Navy Theater Wide can't really do what Navy Area did—are you saying the requirement perhaps isn't as important as it would seem before, or simply that it's not cost-effective?

> I think the [Osprey] program is well laid out. Again, it's not schedule-driven; it's event-driven. And I think, based upon the comments of the program manager, [in whom] I have very high confidence—I think we're going to get a good program. It's going to prove itself one way or the other.

A

The Navy Area was designed for the shorter-range missiles—a terminal defense against a shorter-range missile. The Navy Midcourse System is against longer-range missiles. The Missile Defense Agency has looked at these programs and has determined that they can bring the Navy Midcourse System down to a lower intercept altitude and begin to fill in the shorter-range missiles.

The other look is to take the basic standard—the Block 4 missile—[and] see if we can do something, for example, fusing or some other things, to move its capability up, so that there may be some options to substitute for a single system associated with this block and to do it with multiple capabilities and looking at new kill probabilities.

The other issue is whether or not you really believe the scenario is that valid that we would start a brand-new program. [The scenario is] we will never be able to put [in place] a land-based missile defense system to protect a base [or] a port, other than sea-based only. And [once you] begin looking at all of those [drawbacks], it appears [reasonable] to explore this option of expanding what we've got with a program that looks pretty good—expanding its envelope to shorter-range missiles, and seeing if this is a better solution than starting a brand-new program that obviously puts a lot of pressure on the budget.

Q

Mr. Secretary, can you clarify something about the timing of your Nunn-McCurdy certifications? You said that—speaking SBIRS-High—that six months from now, if you find the program's going south, you'll have no hesitancy to pull the plug. Does that mean that you do these certifications in the case of 25 percent use overruns every six months, or what is the timetable?

A

At any point during these programs, if the program manager sees—based upon the selected acquisition report submission—that these unit costs are going up, they have to notify [my office] or notify the Congress and let us know that within a certain period of time, I have to re-certify. So that's an ongoing process, but I think it's triggered by the selected acquisition reports that come in.

Q

So how come this is the first [Nunn-McCurdy certification] with the Navy Area?

A

[Are you asking] why was it the first time?

Q

Yes.

A

I think we actually found another possible case (we're exploring where it hap-

pened in 1993. But I don't know whether people just rubber-stamped [these programs]. I wasn't here at the time, so I can't say. That's not my method, however. I will not sign my name at the bottom of something that I don't believe.

Q

Mr. Secretary, you used the term "family of ships" for DD(X).

A

Yes.

Q

In the past, you, and I think Comptroller Zakheim, have referred to it as an R&D [research and development] project, and it created heartburn for the Navy, though, which desperately wants to build the ship. So are you now looking at this as the beginning of this "family of ships" the Navy wants?

A

I don't find the Navy has any heartburn with this program.

Q

No, I mean they had heartburn over the way it was being viewed by some of the higher levels in the [Pentagon] because it was being referred to as an R&D project.

A

They may have. The first ship will be an R&D—built with R&D funds. That's somewhat unusual. But in my view, it is a family of ships. I absolutely support what the Navy is doing in DD(X). In fact, I think the concept [was] derived sitting in a meeting with the CNO [Chief of Naval Operations] and the Secretary of the Navy and me in his dining room, that we [first considered] DDX—[that] DD-21 was too narrowly focused for where the Navy was going in the future and that a much broader range of capabilities [was needed], starting with the technologies that are quite good with the new radar and the stealth design, and robotics, and gun systems and propulsion; and all that starting with R&D, but essentially branching out to the cruiser, to littoral ships, and to some type of destroyer. So I fully support what the Navy is doing—and think they've got a great program.

Q

Mr. Secretary, can you say whether or not the experience in Afghanistan was a factor in the battlefield of the future that you describe in weighing the Army's look at Crusader?

A

I'm not sure that would apply to a specific program. I think the battle in Afghanistan clearly pointed out the value of integration of information technology, [and] the role of the soldier on the ground. I mean, *lots* of lessons learned. But I think the value was the integration of all this information and how we could play it together from the point of view of the overhead space capabilities to JSTARS [Joint Surveillance Target Attack Radar System], to gunships, to Predators, to P-3s—all those things working together that were integrated. That was kind of a surprise to us all—how well that was working.

Q

Yes, sir, back to the F-22. There have been reports in the media recently that that program is high on your chopping block (the Pentagon's chopping block), and also reports about structural problems. Could you describe that? Is that program in trouble?

A

I think the program is—from the point of view of the technical [aspect]—making some progress. The test program is going a little slower than we would like. There have been reports of a structural problem, and we were told about that, I think, back in December. It doesn't bother me, because the reason you do tests is [to] find [the] problems.

But it's a load problem on the fin at a particular point. It's a very narrow point in the flight test program. It doesn't bother me because there's plenty of mitigation things that we can work on. That's why you do flight tests. We'll find out about it and we'll correct it.

The program—the F-22 program—to me, is not in trouble in the sense that it's likely to be cancelled anytime soon. We just started it into low rate initial production. I think what we're looking at [as far as] any alternatives is to [determine] the size of the program that we're going to deploy eventually.

Q

A couple months ago you asked [that] a series of studies be conducted looking at the industrial base in the helicopter industry. Those have been completed, and I think you were briefed on that. What were the conclusions of those studies? And I think some of the studies looked at how possible cancellations play out in terms of ramifications on the industrial base. Were these factors in your decision to recertify things like H-1 and the Chinook, and also the V- 22 going forward now?

A

No. The studies concluded that we don't have as much competition in the helicopter industry as we would like, and that because of that, we are not innovative enough. And it's causing me to start thinking out how we can be a little more competitive in the helicopter [industry]. Can we do something to be a little more competitive, and for some time in the future should we be looking at new R&D programs for heavy lift? So we're beginning to think about what we can do in this industry that is essentially defined as three—Bell, Boeing, and Sikorsky—all interconnected together in some way, shape, or form. And I don't like that.

Q

Is it also not the case that it's uncompetitive because a lot of these programs are remanufacture programs—H-1, CH-47—and they're all going back to the original manufacturer?

A

That's right.

Q

How do you break out of that cycle?

A

You have to start thinking about that now—that you'll break out of it maybe in 10 or 15 years from now.

Q

Yes, sir. There have been about a dozen alternative studies for the F-22. Has some-

thing changed? Is there some new alternative to the F-22 that's being looked at or are they the same old alternatives?

A
I'm not sure [what you mean].

Q
Remanufactured F-15s, beefed up.

A
Those are not in the equation. The only thing that's in the equation today is how many F-22s are we going to buy? We have not thought about opening up alternatives of that nature.

Q
But the reason you're evaluating how many you're going to buy—is that capability being offset in some way? Is something else doing that job? That's what I don't understand.

A
No. The situation is that the world changes. Things happen, and we are taking a look at spending our taxpayer dollars in the right way. A year or two ago—more than year or two ago, several years ago—there was a study done that said you probably need 700 F-22s, because we're going to replace the F-15s on a one-to-one basis. That number got changed—"Well, we don't need that many." The QDR [Quadrennial Defense Review] of 1997 says we only need 331 or something of that nature. Now we're saying, "Well, now we've started the Joint Strike Fighter. It's got stealth capability, [and has] some air-to-air capability. Do we need all 331?" And I [must decide] what is the right number, given the new environment, given the new priorities, given the fact that we've got a budget that looks pretty good, in terms of its current projection, but is it going to be the same as you go out in the future?

And we've started a lot of [programs] that have a huge bow-wave effect. Are we spending our money right, given the fact that we may not have the same amount of funding in four or five years from now. So I think this is what's in the equation. It's just, try to recycle.

> I don't think there is any program that should be considered locked in concrete, unless you want to consider the Pentagon. This is probably the only place that's BRAC [Base Realignment and Closure]-proof at this point.

Q
Mr. Secretary, a question on spectrum allocation: There's been some criticism that it hasn't been considered enough in developing new weapon systems. Can you respond to that? And what's being done to give greater consideration to it?

A
Spectrum is important, but this is outside of my area. That belongs to John Stenbit.

Q
But it's part of acquisition, though. It's something you have to take into consideration.

A
Yes, we have to take into account the spectrum process, but [as] I've already said, that's John Stenbit's expertise. I've got enough to do, to tell you honestly.

Q
You mentioned tankers before. And as you know, there's been concerns raised in Congress about the leasing of tankers, as opposed to direct purchase. Can you talk about what benefit you see in some cases of the leasing versus direct purchasing and if the cost of the lease field exceeds that of the direct purchase? In your analysis, would you "nix" the tanker deal?

A
Leasing will always exceed the purchase—if you've ever leased a car, you know the answer to this question. If we're going to have a tanker, and it's going to last 30 years, it is much better for us to go buy it than it is to lease it. But the advantage is essentially what happens in any corporation; it's called cash flow. We can get by with a lot less money for leasing [an airplane] today than we would if we went out and purchased it. And what happens is that after a period of 12, 14 years, the lease cost will start to exceed—will certainly start to exceed—what you would've paid for the same airplane. But you can get by and buy that capability much sooner. You can get it in a few years, and without a huge amount of investment.

And what the Air Force has to do is trade those two things off. They have cash flow problems and other things. And of course then the other issue we have to address is [that] Congress says after a period of lease, you have to give [the leased item] back to the contractor. Well, there's not a whole lot of commercial application for tankers at this point, so why would you do that? And why would the company want to do that? I think what they're hoping for is that they'll get a lease and they'll continue on for 20, 30 years, which is a good deal for the company. It's not such a good deal from a total point of view for the DoD.

Q
On the H-1 program, I believe you said that the reason you're continuing is the alternatives would be more costly. Is that the only reason?

A
No.

Q
What alternatives would there be?

A
There's two. The H-1 has two versions. One's the Huey version; the other's Cobra. And what they're doing is they're remanufacturing the back end to have those two aircraft, through the engines and the rotors and tail rotors, to be com-

mon. So there's a great logistics benefit from having commonality of the two approaches.

From a utility point of view, you could do the H-60s. They're a little more expensive, but you could do that. But from an attack version, the only other option for attack is Apache, which is, I think, twice as expensive as the Cobra.

So then you put into the kitty that, "Well, if I do a utility version over here, and I do the attack version, then I'm not going to get the same logistics support and the economies of scale." So if you put all those together, it is better for us to go down the combined path.

And we did put in a new management system, a new systems engineering capability at Bell for this program, and it looks like a whole new management structure. As a matter of fact, I think 12 of their top people have been replaced.

Q

Mr. Secretary, one of the reasons for going forward with the DD(X) program and the CVX program is that the fleet as we know it in surface ships has not reached the end of its survivability concept with current design. Given that, how would you view the future of the aircraft carriers as we know them?

A

I think anybody who challenges the value of the aircraft carrier has to go to Afghanistan and look at what value it was. I think the Defense Science Board just finished a study of the carrier—of the future of the carrier. I have not seen that yet. In fact, I asked for them to do that study for lots of the reasons you just mentioned. Where is the carrier going?

But from the point of view of the kind of capabilities you can get from air-delivered weapons off of the decks of the carrier, it has to be pretty well demonstrated in Afghanistan.

Now, for the future, if we get the Joint Strike Fighter— the STOVL [Short Take-Off & Vertical Landing] version works well—maybe the future carrier doesn't have an arresting wire for landings. And any large-deck ship becomes essentially an aircraft-deliverable system.

So I have an open mind about the future of the carrier. I think there is value to it, but we have to put all that into how long it takes, how much it costs, what are our alternatives, and so forth. So right now, I don't have a real answer.

Q

A quick follow-up. The survivability aspect of it. I mean, will [future aircraft carriers] carry a battle group? As you see it, [will battle groups] protect a carrier into the short-term future, as you see the threat?

A

I believe that's the case. Again, you have to figure out the threat you're trying to [counter], but [also to be considered] are [things like] getting into littoral areas, the role of ballistic missiles, and high-speed cruise missiles. But the studies I've seen of aircraft carrier survivability really give it a very high [probability].

Q

Sir, earlier on the Osprey you said there had been a lot of concern about hiding of some test results. Do you think that the companies held back test results from the Defense Department, or what are you saying?

A

I wasn't here, so I'm reading what I know about it more in the press—that there were those in the Marine Corps who suppressed some of the data about reliability and safety because it didn't make the airplane look good. And that's what I was speaking of.

Q

The guys at the squadron?

A

Yes. In fact, they placed their careers at risk because they wanted to show the airplane to be performing better than it actually did. So that was what I was speaking of.

Q

Can we ask you to step back from these questions for half a minute—how do you get a weapon cancelled in this town?

A

It's very hard.

Q

I mean, they're already at battle stations on the Crusader. If you want to cancel "weapon X," do you have any magic bullets? We've had two Secretaries of Defense that tried to cancel the V-22; they got "rolled." Is there any new technique you've got in mind to get this thing cancelled?

A

It is the hardest thing to do—to take a weapon out of a program [and] out of the budget. It is just so easy to put one in. I could just as easily tell the Missile Defense Agency, "Go do a new Navy Area." Nobody would have questioned that one second. And we would be spending hundreds of millions of dollars and nobody would ever have said a word.

But take one away? Well, we did the Navy Area. They [acted as though] we had killed somebody. And even restructuring a program like SBIRS-Low; we caught hell over that. It's just hard—it really is.

Q

How are you going to get it done?

A

In Navy Area I did. Nunn-McCurdy is a good tool. If a program is sick, it's going to run into a Nunn-McCurdy problem, and so there's a tool available. The tool is available during the budget process. Some of these, in the DPG we could have written, "Terminate this and terminate that," and it would have happened. But it is very hard.

Q

I just had a clarification and a question. The clarification is on the F-22. You said you were informed of the structural problem around December [2001]. Was that before or after the Defense Acquisition Board? And then the question is, the SBIRS-High, is the schedule slipped down?

A

The schedule has been adjusted. What we've done with SBIRS-High is that independent estimates have come in and

said the schedule looks very aggressive, so we've adjusted the cost and the schedule to be a little more executable. But I have let the Air Force say if they believe they can accelerate the schedule within the dollars that are provided, [so] they're authorized to do so. Why not? I mean, if we can get things up earlier, that's great. But we have put together what I believe is an executable program with a schedule that is somewhat relaxed, [with a] higher probability of being achieved; if the program managers feel comfortable [accelerating the schedule], [they] may be able to move some of that up within the dollars. They can do so.

Q

Sir, the Block 4-A missile that went away along with Navy Area …

A

It's the Block 4 missile, not the Block 4-A. It's an air defense capability. It doesn't have as good a kill probability as the Block 4-A, but we think we can do some things to get the kill probability up. And if we can do that, it will absorb a lot of the shorter-range capability that was lost. There's a lot more work to be done in this area.

Q

In addition to the extended AAW [air-to-air weapons] mission, if you take that on as well?

A

Yes.

Q

The Chinook. What alternatives did you look at? And what did you ask Boeing to change in the program?

A

For what?

Q

For Chinook.

A

For CH-47? Yes, I've got so many things running in my mind about the Chinook. One, we did the CAIG estimate for the cost. Boeing's program description [and] their management were pretty good, so we didn't have much to do [on] that one. I think the main thing was the cost. We adjusted the cost number to take the CAIG estimate. And that's what brought the confidence that they could deliver the airplane. And of course, we looked at the alternative, which was a heavy-lift helicopter. The only solution was the CH-53, which is about two or three times more expensive than the Chinook. So the alternatives didn't look attractive. Basically we need a heavy-lift helicopter. And as long as the costs now would come under control, I was pretty confident that Boeing was going to bring [it] in—the management schemes they've got at Boeing looked pretty good to me.

> If I want to tell somebody that I have properly priced the program, I have a tool, and I'm going to use that tool. It's called CAIG [Cost Analysis Improvement Group].

Q

You referred earlier to the battlefield of the future. Can you just talk in general about the role of UAVs [Unmanned Aerial Vehicles] on that battlefield, and then in particular about the specific programs in the Services for UAVs? How are they going? And how much money do you expect those [programs to cost]?

A

UAVs are getting a lot of attention. In Afghanistan they're pretty much battle-proven now. Some of those who were skeptical about the value of UAVs have gone away. The Services have a wide variety of UAVs, from the Army's Shadow to the Predator, to the Global Hawk. DARPA [Defense Advanced Research Projects Agency] has two programs underway—one for the Air Force and one for the Navy: new UCAVs [Unmanned Combat Aerial Vehicles]. DARPA also has some work going in micro-UAVs. I mean, everybody's got a UAV concept going now. The Navy at one time had a UAV helicopter called Fire Scout. That was terminated. But there are new technologies going. In fact, one of the things that looks very attractive is this new Canard roto-wing concept that the Navy has for a vertical takeoff and lift. But once it gets rolling, it actually goes jet speed. So it has speed and vertical takeoff and landing. It's very attractive as a potential UAV candidate.

I went to the Singapore Air Show as a guest of the Singapore Government and looked at the displays in all these foreign countries. Everybody has a UAV—*everybody*.

Q

[What's being done] as far as ramping up on the UAVs across the board?

A

Yes, we're accelerating Predator and Global Hawk, making sure Global Hawk has improved power and sensors. Basically, Global Hawk's going to replace the U-2. One day, that'll be about the same capability.

Q

And finally on UCAVs, Senator [John] Warner a couple of years back talked about [how] a third of combat aircraft can be replaced with UCAVs. I mean, do you think that's a possibility over the next decade and a half?

A

I don't know if a third is the right number, but one could certainly imagine the tac-air [tactical air] support to a theater consisting of F-22s and air cover, Joint Strike Fighters going in and going after mobile targets, and UAVs going together. And in fact, in *Aviation Week*, there's [an article] about the French having the back-seater of one of their aircraft controlling four UAVs in kind of a swarm. We're look-

ing at the same thing as a possibility. So it makes sense.

Q

You spoke a number of times about the need to make certain profit rates here comparable to the commercial sector. Do you have anything in the works right now to actually convert your view to a policy?

A

Yes, there's work in process, and one of these days, I'll find out [and] tell you about where it is. I get swamped with other things … most of the time I get these issues [like] Crusader and things of that nature.

Q

But it's ongoing?

A

It is in the works. It's what's called "weighted guidelines." And one of the things we want to look at in the weighted guidelines is how does one calculate the fees for various kinds of contracts? And one of the things I want to remove out of that is facilities [being] part of the equation that allows companies to make profit on facilities; so that's an incentive for them not to get rid of excess capacity, because they get fee on top of that. Somehow the weight's wrong, and we need to make sure we do that right.

Q

I just want to ask you a broader question, about transformation, because I've heard that today we are going to get a briefing from the new Director of Force Transformation, retired Navy Vice Admiral Arthur Cebrowski. Admiral Cebrowski [has said] on numerous occasions that military transformation means preparing for warfare in the information age. And I'm wondering if that means—in terms of acquisition—does that mean [a shift in] investment in the information technology and telecommunications sector to the more traditional industrial-base types of activities?

A

It does mean that, but I would say it's much, much broader than that, as well.

> The combination of evolutionary spiral development that gets something to the field quicker, with less risk, coupled with properly pricing programs—I can't think of any better way to maintain stability in a program than those two events.

I use this example too many times: A guy on a horseback with a GPS receiver calling in B-52s for close air support is kind of a transformational thought, in my view. And yet it was all legacy systems. But it was a different use of the systems that we have rather than something new and different, new in technology. But I think it is new technology because it allows you to do things in a much more effective way than you did in the past.

But transformation—and I've used this many times—is a journey. We're never going to get there. It's because transformation today will be different than transformation of tomorrow. And so I think Admiral Cebrowski's view is [similar]—I think I've heard him say it's much broader, and I agree with him—it's much broader.

Q

Do you plan any kind of restrictions on SBIRS-High now that you've certified it? And are there any kind of concerns, particularly to the HEO or GEO payloads?

A

We've certified to the four criteria. We've got a restructured program. It's been priced. It's going into the Air Force budget with the new numbers, with the new schedule. They have to come back with an updated program plan that puts all that together. I've asked for a review in about six months to see how well they're doing. I'd like to see [whether] the cost trends have started to make any difference in direction. But as you know, in the space business, we've transferred that responsibility from Milestone Decision Authority to Mr. [Peter] Teets as the Under Secretary of the Air Force. So since I have gone through the certification process—because I am the only one who has been delegated that responsibility for SBIRS-High—we're going to start moving some of the program day-to-day activities over to Mr. Teets—he'll have the next one.

Q

The EA-6B replacement study is out, yet there has been some talk that the Air Force is saying it's a nice study, but it didn't go far enough (just talking about aircraft replacement). What is your feeling on that study?

A

They need to make a decision rather than continue to study something. There are some interesting things in there. What we've asked the Air Force and the Navy to do is get together and go figure out a plan, because we can't afford two different airplanes for the two Services. There's going to be an integrated EA- 6B replacement of some type. And if we can get the Air Force and the Navy together to figure out what that ought to be, that's the right answer.

Q

Mr. Secretary, a common denominator in each of the programs that you mentioned in the letter that you sent to the Hill on Nunn-McCurdy, was that you were going with the CAIG estimate.

A

Yes.

Q

Is that significant? If so, why?

A

The CAIG estimates traditionally—and I [speak from] years [of experience with CAIG estimates] since I worked for PA&E in 1967 when we first started the CAIG —[are] usually within about 2 percent of the actual cost of a program when it's finished. The Service estimates are anywhere between 17 and 19 percent low. I'd rather go with a program that I have a little more confidence in, even though it's not perfect. And there will be some changes to it. In fact, the CAIG's been 2 percent low—it hasn't been high—on the average. And so I think it is better to take an independent look where people have data that go far beyond the individual program managers' [data]—they see all of these programs of all the Services. And they have a lot more data on which to make an assessment of what they believe the cost is really going to be. I feel more comfortable taking that estimate than I do taking the Service estimate, although in some cases I've taken the Service estimate when I thought it was better. In fact, that's what we did with the F-22. We just bought the number of airplanes we could buy at the CAIG number.

If I want to tell somebody that I have properly priced the program, I have a tool, and I'm going to use that tool. It's called CAIG. And if I feel that there's a huge difference in the cost between a Service and the CAIG, I want to use the CAIG, because we are more likely to come in at that cost. I've made this speech before—the combination of evolutionary spiral development that gets something to the field quicker, with less risk, coupled with properly pricing programs—I can't think of any better way to maintain stability in a program than those two events.

Editor's Note: This information is in the public domain at http://www.defenselink.mil/news.

Defense Acquisition University and The Boeing Company Form Strategic Partnership

On June 20, 2002, Defense Acquisition University (DAU) President Frank Anderson Jr., and Stephen R. Mercer, Vice President, Learning and Leadership Development, The Boeing Company, formalized their ongoing relationship by signing a Memorandum of Understanding (MOU) to support each other's efforts to leverage the best business practices of government, corporate universities, and business for world-class training and education.

DAU and Boeing have long shared a mutual commitment to excellence in learning and an ongoing strategic collaboration for the best training that builds on the expertise of both the public and private sectors. This MOU establishes the framework to pursue educational opportunities that are mutually beneficial. Opportunities indemnified for the partnership include but are not limited to the following:

- The sharing of training resources, including the attendance of Department of Defense personnel at Boeing courses, and the attendance of Boeing personnel at DAU courses for the purpose of improving each other's course offerings.
- Collaboration on course topics and course content, including reviews of student case presentations and mock negotiation exercises, providing the contractor's perspective in DAU courses and providing the government's perspective in Boeing courses.
- Guest visits by Boeing senior leadership as well as other participation by Boeing leaders as instructors and panel members at DAU courses.
- Guest visits by DAU's senior leadership as well as other participation by DAU leaders as instructors and panel members at Boeing courses
- Providing feedback to each other on training pilots and other course development activities.

For further information on this partnership, contact Wayne Glass, Director for Strategic Partnerships, Strategic Planning Action Group, at Wayne.Glass@dau.mil, or call 703-805-4480.